

# Notice of Allowability

Application No.

09/577,961

Examiner

Justin T. Darrow

Applicant(s)

DURST ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed 10/06/2004.
2. ☒ The allowed claim(s) is/are 1-14 and 18-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

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### **DETAILED ACTION**

1. Claims 1-33 have been presented for examination. Claims 1, 6, 8, 9, 12, 14, 18-24, 28, and 29 have been amended, claims 15-17 have been canceled, and new claims 31-33 have been added in an amendment filed 10/06/2004. Claims 1-14 and 18-33 have been examined.

### **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven M. Hoffberg on 09/02/2005.

In the Claims:

Claim 6, page 7 of CLM(10/12/2004), delete "of" in line 2.

### ***Drawings***

3. The drawings were received on 10/12/2004. These drawings are approved.

### ***Response to Arguments***

4. The examiner regrets the reliance on Kaish et al., U.S. Patent No. 5,974,150 A as prior art of another under 35 U.S.C. 102(e). Because the image file wrapper system was unavailable

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when this action was composed, the examiner did not have access to the declaration.

Additionally, the patent application database had an incorrect listing of the applicants of the instant application. These problems have been corrected.

***Allowable Subject Matter***

5. Claims 1-14 and 18-33 are allowed.

6. The following is an examiner's statement of reasons for allowance:

Claims 1-7 are drawn to a recording apparatus. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar apparatus. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither teaches nor suggests a physical transfer mechanism, adapted for selectively physically transferring portions of a recording medium, having a plurality of potential respective different dichroic optical properties, to a carrier in a selective pattern defined by an input, where the transferred portions have respective different dichroic properties after being transferred. This distinct feature incorporated into independent claim 1 renders claims 1-7 allowable.

Claim 8 is drawn to a recording medium. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar medium. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither shows nor implies the recording medium being adapted to selectively physically transfer portions of a polymer, having a potential predefined dichroic optical property, to a carrier with the predefined

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dichroic optical property. This element explicitly recited in independent claim 8 render it allowable.

Claims 9-11 are drawn to a recording method. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar method. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither describes nor motivates transferring portions of a recording medium, having at least two different potential predefined dichroic properties, to a carrier to obtain a carrier having transferred portions having at least two different dichroic properties thereon. This particular step explicitly recited in independent claim 9 renders claims 9-11 allowable.

Claims 12 and 13 are drawn to an imprinted carrier. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar carrier. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither points out nor suggests a carrier having a plurality of portions having respectively different predefined dichroic properties. This distinct feature explicitly recited in independent claim 12 renders claims 12 and 13 allowable.

Claim 14 is drawn to an authentication device. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar device. Although Kaish et al. describes a dichroism detection system (see page 32, lines 7-17; figure 2), this reference neither teaches nor suggests an illumination system having an output adapted for exciting dichroic properties of an optically active material and

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differentiating between respectively different dichroic properties of the optically active material having a plurality of time-varying states. This particular component explicitly recited in independent claim 14 renders it allowable.

Claims 18-20 are drawn to an optically readable data storage medium. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar medium. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither shows nor implies a recorded hash of descriptions of the optically readable characteristics associated with the data storage medium, the data pattern and the optically readable characteristics being adapted to be readable by a common imaging system. This distinct feature explicitly recited in independent claim 18 renders claims 18-20 allowable.

Claim 21 is drawn to a data storage disk. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar disk. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither describes nor motivates an ascertainable variable dichroic pattern generated during a physical manufacturing process formed on the disk, and a variable code representing the variable dichroic pattern stored on the data storage disk, wherein the variable code provides self authentication for the data storage disk based on the ascertainable variable dichroic pattern. This combination of features explicitly recited in independent claim 21 renders it allowable.

Claims 22-28 are drawn to an encoded optical disk reader. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO

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99/17486 A1, discloses a similar reader. Although Kaish et al. describes a dichroism detection system (see page 32, lines 7-17; figure 2), this reference neither shows nor implies an optical sensor having a common optical path for reading deterministic authentication data on the disk, a non-deterministic characteristic comprising a pattern of dichroic properties formed during a manufacturing process of the disk, and data to be read from the disk, where the data pattern being distinct and separate from the pattern on non-deterministic characteristics. This particular element explicitly recited in independent claim 22 renders claims 22-28 allowable.

Claims 29-33 are drawn to authenticating sealing tape. The closest prior art, Tracer Detection Technology Corp. (Kaish et al.), International Application Publication No. WO 99/17486 A1, discloses a similar disk. Although Kaish et al. describes dichroic fibers having a fixed relation to a positional reference (see page 31, lines 1-5; figure 1, item 3), this reference neither teach nor suggest that the authenticity of the tape may be verified by analyzing a correspondence of a deterministic identification portion with a proximate non-deterministic characteristic, and a tamper status of an object associated with the tape may be verified by analyzing a seal tamper indicator. These distinct properties explicitly recited in independent claim 29 render claims 29-33 allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Telephone Inquiry Contacts*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin T. Darrow whose telephone number is (571) 272-3801, and whose electronic mail address is justin.darrow@uspto.gov. The examiner can normally be reached Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón, Jr., can be reached at (571) 272-3799.

The fax number for Formal or Official faxes to Technology Center 2100 is 571-273-8300. In order for a formal paper transmitted by fax to be entered into the application file, the paper and/or fax cover sheet must be signed by a representative for the applicant. Faxed formal papers for application file entry, such as amendments adding claims, extensions of time, and statutory disclaimers for which fees must be charged before entry, must be transmitted with an authorization to charge a deposit account to cover such fees. It is also recommended that the cover sheet for the fax of a formal paper have printed "**OFFICIAL FAX**". Formal papers transmitted by fax usually require three business days for entry into the application file and consideration by the examiner. Formal or Official faxes including amendments after final rejection (37 CFR 1.116) should be submitted to 571-273-8300 for expedited entry into the application file. It is further recommended that the cover sheet for the fax containing an amendment after final rejection have printed not only "**OFFICIAL FAX**" but also "**AMENDMENT AFTER FINAL**".

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

September 6, 2005



**JUSTIN T. DARROW  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100**